



*La*

**HORWICH**  
**URBAN DISTRICT COUNCIL.**

---



**ANNUAL REPORT**  
**OF THE**  
**Medical Officer of Health,**  
**For Year Ended 31st December, 1914.**

**J. S. SEWELL, M.D.,**

**M. O. H.**







HORWICH URBAN DISTRICT COUNCIL.

---

# MEDICAL OFFICER'S REPORT

For the Year ending 31st December, 1914.

---

To the Chairman and Members of the

Horwich Urban District Council.

“GENTLEMEN,

I beg to present my 7th Annual Report for the year ended December 31st, 1914.

## A.—NATURAL AND SOCIAL CONDITIONS OF THE DISTRICT.

The total population estimated to the middle of the year 1914, was 16,764. At census 1911 it was 16285.

The social conditions of the inhabitants have been influenced to some extent as a result of the European War. Lack of employment has affected chiefly the textile and bleaching trades. Fortunately the locomotive works, our chief industry, has been practically working full-time and in some of its departments business has been carried on at high pressure. Thus on the whole Horwich has been satisfactorily situated as compared with many other towns.

The Authority for Poor Law relief is the Bolton Union.

Cases requiring hospital treatment are sent to the Bolton and Manchester Infirmaries.

The Horwich District Nursing Association which is entirely supported by voluntary efforts continues to do good work in the district. During the past year 207 cases were nursed and 4224 visits paid. Like many other charities its funds have suffered somewhat owing to the war.

No troops have been quartered in our district.

## B.—SANITARY CIRCUMSTANCES OF THE DISTRICT.

*Water Supply.*—The water supply of the district is chiefly derived from moorland. It is stored in the new reservoir at Marklands. The supply continues to be good and plentiful. It has not been necessary to curtail the domestic supply. It is a curious fact that in spite of the large addition to our water carriage system which has recently taken place, the actual consumption of water as shewn by meter has diminished. In the old days of privies and privy middens it was a common sight to see the residents flushing out the buildings after each weekly emptying. In this way a large amount of water was run to waste. Thus the chief objection which was urged against our conversion scheme namely, the necessity for more water, has been shewn to be without foundation.

There has been no pollution.

I herewith append Analysis of Water taken 16th February, 1915.

“Expressed in parts per 100,000.

Mark or Denomination of Sample					Drinking Water
Total Solids in Solution	...	...	...	...	24·4
Oxygen absorbed from Permanganate	in 15 minutes				·033
	in 3 hours				·077
Ammonia	...	...	...	...	·001
Albuminoid Ammonia	...	...	...	...	·001
Nitrogen as Nitrates	...	...	...	...	Slight trace
„ as Nitrites	...	...	...	...	None
Combined Chlorine	...	...	...	...	1·4
Temporary Hardness	...	...	...	...	0
Permanent „	...	...	...	...	9·7

This water is quite fit for drinking and domestic use.”

*Rivers and Streams.*—The condition of Pearl Brook still continues to give annoyance especially in hot weather. The only solution of the difficulty is to have the bed of the stream paved throughout its entire length.

*Closet Accommodation.*—During 1912 a Local Government Board Inquiry was held and sanction was obtained for the borrowing of £4,500 for the complete abolition of all the privies and pail closets in the district and their conversion to the water carriage system. This work has been steadily proceeded with and the whole town with the exception of the outlying farms and houses, which do not possess sufficient water supply and sewers, is now on the water carriage system. During 1914 147 privies and 69 pails have been converted to the water carriage system. As stated in my 1913 report I consider this a notable sanitary improvement. I would again urge that as a corollary to this improvement all ashpits should be abolished in favour of the more sanitary dust bin.

The following is a list of the sanitary conveniences in the district :

Fresh Water Closets	...	...	...	...	2557
Waste Water Closets	...	...	...	...	1257
Latrines	...	...	...	...	202
Privies	...	...	...	...	64
Pail Closets	...	...	...	...	95
Dust Bins	...	...	...	...	1145
Ashpits	...	...	...	...	1307

*Drainage and Sewerage.*—During the year practically the whole of the sewage of the district has received treatment by chemical precipitation and bacterial filtration by sprinkler distribution on percolating filter beds. The purification continues to be satisfactory and we are able to show a good effluent. I would again suggest that facilities be provided for the carrying out of the water carriage system and other sanitary improvements at Foxholes, and Factory Hill district. This would necessitate an extension of the sewerage system in conformity to a Town Planning scheme to which reference will be made later.

There have been 1007 loads of sludge cake extracted from the sewage during the year. The farmers continue to place a value on this product for manurial purposes and pay a charge of 9d. per load which the Council imposes.



*Scavenging.*—This is efficiently carried out by the Council's workmen. During the year 230 privies, 12,300 ashpits, 5,494 pails, and 57,765 dust bins have been emptied, making 4,067 loads of refuse, of which the greater portion has been carted to Red Moss, and an additional area has been reclaimed for cultivation.

During the year 21 ashpits have been abolished and 58 dust bins substituted.

*Sanitary Inspections of the District.*—Inspections have been regularly and specially made throughout the district. The following is a classified statement of the number of inspections and re-inspections made :

Houses and premises, 667 ; Slaughter Houses, Butchers' Shops, etc., 623 ; Dairies, Cowsheds, and Milkshops, 212 ; Fried Fish and Chip Shops, etc., 175 ; Ice Cream Shops, 9 ; Lodging Houses, 50 ; Schools, 25 ; Waterworks, 3 ; Sewage Works, 10 ; Hospitals, 19 ; Garages and Stables, 120 ; Water Closets, Privies, Urinals, Ashpits, Pail Closets, Drains, Gullies, etc., 494 ; Yards, Streets, etc. 98 ; Red Moss, 75 ; Factories, 28 ; Workshops, Workplaces, and Bakehouses, 53 ; Infectious Diseases (including Tuberculosis), 214 ; Market, 53 ; Miscellaneous, 2060.

The work done under the above headings will be described in the various parts of the report.

The following is a summary of the abated nuisances and the necessary actions to remedy them :

Defects to drains, closets, and waste pipes made good	...	208
Repairs to yard walls, doors, ashpits, privies, and pail closets		1
New drains to premises provided	... ..	5
New water closets provided	... ..	217
New and improved gullies, tops, and new slop pipes provided		18
New dust bins provided	... ..	58
Privies, pail closets, ashpits, & waste water closets abolished		237
Reflagging yards and general repairs to property	... ..	3
Defective roofs, spouting, and rain water pipes	... ..	9
Other nuisances abated	... ..	5

There have been 177 informal notices served. I find that 124 have been complied with, 53, not yet complied with.

86 statutory notices have been served and of these 33 have been complied with, 53 not complied with.

The majority of the notices not complied with at the end of the year will receive attention in 1915.

*Lodging Houses.*—There are two common lodging houses in the district. These have been regularly visited. The bye-laws have been adhered to.

There are no cellar dwellings or offensive trades in the district.

*Smoke.*—21 observations have been made of smoke emitted from chimneys in the district. The time limit is five minutes per half hour. There was no necessity for legal proceedings in any case.

*Schools.*—These were regularly inspected and found to continue in a sanitary condition. The water supply which is from the town's mains is good and plentiful. A weekly statement is now sent to me by the School Attendance Officer stating the number of absences at each school due to the various contagious diseases. This enables one to see at a glance the incidence of disease at a particular school. The Infant department of the Lord Street Council School was closed for 3 weeks owing to an outbreak of scarlet fever. Cases unrecognised by the parents were being allowed to attend this school. The infant department of the National Schools was also closed for a period of three weeks owing to an outbreak of Whooping Cough.

The arrangements for the medical inspection of school children are in the hands of the County Council.

#### FOOD :

(a) *Milk Supply.*—There are 37 cowkeepers and 19 purveyors of milk on the register. During the year 212 inspections have been made. On the whole dairies, cowsheds, and milk vessels are kept in a clean sanitary condition. In the course of my inspections I have had occasionally to draw attention to want of cleanliness and some carelessness in the use of a proper water

supply. At one farm a suspicious looking cow was observed. The milk supply was stopped and the cow isolated. The County Authorities were immediately notified and they had the necessary tests performed. The cow was proved to be non-tuberculous. During a recent series of investigations carried out in Edinburgh, cases of non-pulmonary tuberculosis were proved in almost every case to have been due to infection from tuberculous milk and the actual animal which had caused the infection was in many cases found.

The Milk and Dairies Act of 1914 provides for the veterinary inspection of dairy cows. This is a very necessary measure and will be the means of exercising a more efficient control over the milk supply of the people and especially of young children.

(b) *Other Foods*.—There are 3 slaughter-houses in the district—1 registered and 2 licensed. These have been regularly visited both at the time of slaughtering and at other times. The necessary regulations with regard to cleanliness, etc. were being adhered to. From a humanitarian point of view great care should be taken that all blood, etc. should be removed from the house after the slaughter of one animal before that of another is carried out.

There have been 28 seizures of diseased and unsound food consisting of 1 cow (tuberculous), 6 rabbits (decomposed), 2 cow's livers (tuberculous), 11 sets of cow's lungs (tuberculous), 1 pig's head (tuberculous), 6 sets of pigs lungs and livers (tuberculous), and 1 cow's heart (diseased).

The ideal system is the possession of a public abattoir where proper inspection of all carcasses can be obtained.

Bakehouses have been kept in a satisfactory condition, also the shops and places used for the preparation and sale of food.

#### HOUSING :—

Under Article V. of the Housing (Inspection of district) Regulations, of 2nd September, 1910, the following is a tabulated statement of action taken during the year :

The number of dwelling houses inspected under and for the purposes of Section 17 of the Act of 1909	...	...	38
---	-----	-----	----

The number of dwelling houses which on inspection were considered to be in a state so dangerous or injurious to health as to be unfit for human habitation	...	...	none
--	-----	-----	------



The number of representanions made to the local authority  
with a view to the making of closing orders... ..none

The number of closing orders made ... ..none

The number of dwelling houses the defects in which were  
remedied without the making of closing orders ... 25

The number of dwelling houses which after the making of  
closing orders were put in a fit state for human  
habitation ... ..none

The general character of the defects found to exist continue  
to be general dampness of walls and basements; defective walls,  
roofing, spouting, floors, also want of ventilation.

In regard to part 3 of the Housing of the Working Classes  
Act the empty property in Horwich at present does not exceed  
one per cent of the total number of dwellings. Although to  
my knowledge there is no marked overcrowding the Housing and  
Town Planning Committee are considering a scheme for the  
erection of about 50 cottages to meet any shortage which may  
arise in the near future.

With regard to Town Planning the Council have also taken  
a deep interest, having had the matter of the preparation of a  
scheme under consideration for some time. An interview has  
taken place between the Town Planning Committee and Mr.  
Aldridge, the Secretary of the National Housing and Town Plan-  
ning Council, as to the best method of commencing the prepara-  
tion of a scheme and the cost of the same. Further consideration  
is deferred for the present.

During the year in order to prevent further congestion of  
population in Central Ward the Council have purchased for £400  
two vacant plots of land together making 2,535 square yards in  
extent (exclusive of streets). This land which borders on Mottram  
Street has been temporarily covered with ashes and the Council  
intend to make it into a public playground. This was a very  
wise proceeding as there are already as many houses in Central  
Ward as is compatible with the good health of the inhabitants.

## C.—SANITARY ADMINISTRATION OF THE DISTRICT.

1. The Sanitary Department consists of the following staff:  
Medical Officer of Health, Sanitary Inspector, Clerk, and  
disinfector, 3 scavengers, 3 carters and 1 man at Red Moss.

I have much pleasure in again acknowledging the hearty co-operation of the Sanitary Inspector and all other Officials in the work of this department.

2. The Infectious Diseases Hospital is situated at Fall Birch. It is held conjointly with Westhoughton and Blackrod. 48 beds are available. Two diseases can be treated concurrently. There is also a special isolation block where doubtful cases or a third disease can be treated. I would again point out the need of accommodation for the hospital treatment of Puerperal Fever, Ophthalmia Neonatorum, and bad cases of Erysipelas. The treatment of such cases in a private house is most unsatisfactory, and no general hospital will give them admission. For the present we are in the fortunate position of having very few such cases but when they do occur the urgency is great. Two or three beds would probably meet all ordinary requirements.

The temporary Small Pox Hospital is situated on Red Moss. It has been regularly inspected and certain improvements carried out. Dr. Sergeant, County Medical Officer of Health, in his annual report for 1913, states: "that although there has been comparative freedom from small pox it is hoped that local authorities will not be induced to view the disease as one which need not be guarded against. It should be remembered that the small pox danger is a constant one, and authorities ought to be in a state of preparedness for promptly dealing in suitable isolation hospitals with any cases which may arise." The Local Government Board in a recent circular to sanitary authorities states "that under present conditions the introduction of the disease is not unlikely, and the prevention of the spread of the disease if it should appear, will depend almost entirely on the efficiency of the arrangements made previously for dealing with and following up early cases."

The increasing tendency to neglect infant vaccination has been pointed out by Dr. Harris, of Chorley, in his report to that borough. The same tendency prevails in Horwich. It is greatly to be regretted that this undoubted safeguard against small pox is being omitted. Improved sanitary conditions will not be sufficient compensation for this.

3. The following Acts are in force in the district: Public Health Act, 1875; Infectious Diseases Notification Act, 1889; Public Health Acts, Amendment Act, 1890; Infectious Diseases Prevention Act, 1890; Public Health Acts, Amendment Act, 1907; and the Housing and Town Planning Act, 1909.



4. Bacteriological and chemical specimens are submitted to the pathological laboratory of the Victoria University, Manchester, for examination. A record of the bacteriological and chemical work will be found under the various headings in the report.

#### D.—PREVALENCE AND CONTROL OVER ACUTE INFECTIOUS DISEASES.

The total number of notifications during the year amounted to 98. The diseases notified were: Erysipelas, 3; Diphtheria and Membranous Croup, 18; Scarlet Fever, 74; Typhoid Fever, 3. In 1914 the number of notifications was 81. The increase in the number of the present year's notifications is due in great measure to an epidemic of Scarlet Fever to which reference will be made later. Of this year's cases 74, comprising: Diphtheria, 9; Scarlet Fever, 63; and Typhoid Fever, 2; were removed to hospital for treatment and isolation.

*Diphtheria and Membranous Croup.*—18 cases notified during the year, 9 being removed to hospital. 15 bacteriological examinations were made during the year with the following results: 5 positive; 10 negative. Four deaths have occurred. A few of the cases were due to personal infection. The rest occurred sporadically and no definite connection could be traced between them.

The Council continue to supply diphtheria antitoxin free of charge to medical practitioners.

*Scarlet Fever.*—74 cases notified; 63 of these being removed to hospital. As in 1914, when there were 40 cases, the disease has been of a mild type, no deaths occurring. The largest number of cases were notified during the month of June. In investigating this outbreak we were able to trace 3 cases in the peeling stage which had been unrecognised by parents. Isolation of these cases and closure of the infant department of the Lord Street Council School at which they were attending, at once checked what threatened to be a serious epidemic.

*Enteric Fever.*—3 cases, all of which were fatal. In only 1 of these cases was the Widal reaction positive, the other two being negative. The only positive case was transferred from the Bolton Infirmary.

During the year the Widal reaction was performed in 5 cases, positive 1, negative 3, and doubtful 1. In 1913 there were two cases of this disease.

*Erysipelas*.—3 cases with no deaths. In 1913, 5 cases with no deaths.

*Puerperal Fever and Ophthalmia Neonatorum*.—As in 1913, I am pleased to report no cases.

*Acute Poliomyelitis and Cerebro Spinal Fever*.—No cases.

*Whooping Cough*.—No deaths registered as due to this cause. The infant department of the National Schools was closed owing to an epidemic of this disease.

*Measles*.—No deaths due to this disease. There has been no marked epidemic.

### E.—PREVALENCE AND CONTROL OVER TUBERCULOSIS.

Tuberculosis of the lungs caused 15 deaths, a rate of .89 per 1,000. Last year 16 deaths were registered as due to this cause, with a rate of .96 per 1,000.

Non pulmonary Tuberculosis caused 9 deaths. In 1913, there were 7 deaths.

33 cases of Pulmonary and 7 of other forms of Tuberculosis have been notified to me by medical practitioners under Tuberculosis regulations, 1912. Each person has been visited and revisited, leaflets distributed, and the usual hygienic measures advised. Each week, in addition to sending a list of all new cases to the county authorities, I also send a duplicate list to the Tuberculosis Officer for the district. The Tuberculosis nurse visits every case and some are also visited by the Tuberculosis Officer. I have had several consultations with the latter with reference to joint action against this disease.

No unrecognised cases were found in connection with the notified cases of the disease.



On a death occurring, or on the removal of the patient to a sanatorium, the premises, bedding, clothes, etc. are disinfected.

9 examinations of sputa were made during the year with the following results: positive, 1; negative, 8.

There is no hospital accommodation for Tuberculosis in this district.

I would again draw the attention of the public to the salient safeguards against this disease. They are, plenty of fresh air and sunshine through open windows, consumption of such fatty foods as dripping, margarine, etc., avoidance of all spitting in streets and public places, and the destruction of all the expectoration by burning. In the case of Non-Pulmonary Tuberculosis in addition to the above, special stress should be laid on a pure milk supply to which I have referred previously.

#### F.—INVESTIGATION OF OTHER DISEASES.

*Zymotic Diseases.*—The number of deaths due to the principal zymotic diseases, including Small Pox, Scarlet Fever, Diphtheria, Diphtheritic Croup, Enteric Fever, Measles, Whooping Cough, Epidemic Diarrhœa, and Enteritis, was 15; equal to a rate of '89 per 1,000. In 1913 the rate was 1·2 per 1,000.

Diarrhœa and Enteritis caused 8 deaths.

*Diseases of Organs of Respiration.*—17 deaths were due to these affections: Pneumonia, 7; Bronchitis, 8; and other diseases, 2. The rate is 1·01 per 1,000 as compared with 1·9 per 1,000 in 1913.

*Malignant Disease* caused 15 deaths as compared with the same number last year.

There has been no outbreak of food poisoning.

#### G.—MEANS OF PREVENTING MORTALITY IN CHILD-BIRTH AND IN INFANCY.

The administration of the Midwives Act 1902, is vested in the County Council.

The Notification of Births Act, 1907, has been adopted since the end of the year and the machinery is now being arranged. I shall refer again to this whilst discussing "Infantile Mortality."

A large card, capable of being hung upon the wall, having upon it "Directions for the Feeding and Care of Infants" is distributed by the Registrar under the Council's instructions to all those who register a birth. I have personally observed in many cases that this card is preserved and its directions are being adhered to.

*Infantile Mortality.*—The deaths of children under 1 year number 27. I am glad to say a considerable decrease on 1913. The mortality (measured in the proportion of deaths under 1 year to 1,000 births) was 75. In 1913 the number was 43, and the rate per 1,000 births 116. It is instructive to compare the various wards as follows: North Ward, 4; South Ward, 10; East Ward, 2; Central Ward, 11. Calculated per 1,000 births the rates are as follow: North Ward, 51; South Ward, 106; East Ward, 27; Central Ward, 102. Central and South Ward have again an unenviable notoriety with regard to this rate. East Ward as in 1912 and 1913 has again by far the most favourable return.

I append a table comparing the infantile rates in each ward for 1914 with those of the 5 previous years:

*Infantile Rates per 1,000 births.*

	North	South	East	Central
1909	188	86	57	123
1910	126	100	77	212
1911	65	172	53	125
1912	87	63	0	126
1913	141	134	33	153
1914	51	106	27	102

In my report for last year I entered very fully into the problem of child welfare and recorded the many factors concerned in causing excessive infant and child mortality. I would refer members to that report for more detailed information on this subject.

The Local Government Board have recently issued a memorandum outlining a complete scheme of Maternity and Child Welfare. It comprises the following elements each of which will, in this connection, be organised in its direct bearing on infantile health.



1. Arrangements for the local supervision of midwives.

2. Arrangements for—

- |            |   |   |
|------------|---|---|
| Ante-Natal | { | (1) An ante-natal clinic for expectant mothers.<br>(2) The home visiting of expectant mothers.<br>(3) A maternity hospital, or beds at a hospital, in which complicated cases of pregnancy can receive treatment. |
|------------|---|---|

3. Arrangements for—

- |       |   |   |
|-------|---|---|
| Natal | { | (1) Such assistance as may be needed to ensure the mother having skilled and proper attendance during confinement at home.<br>(2) The confinement of sick women especially difficult cases at a hospital. |
|-------|---|---|

4. Arrangements for—

- |            |   |  |
|------------|---|--|
| Post-Natal | { | (1) The treatment in a hospital of complications arising after parturition whether in the mother or in the infant.<br>(2) The provision of systematic advice and treatment for infants at a baby clinic or infant dispensary.<br>(3) The continuance of these clinics until the infants are entered upon a school register and come under the care of the school medical department.<br>(4) The systematic home visitation of infants and children who are not upon a school register. |
|------------|---|--|

It is of course not expected that in such places as Horwich complete schemes can be initiated. Our endeavour, however, must be to make partial arrangements that can ultimately form part of a more extended organisation. I am pleased to report that the Council have, since Jan'y. 7th, 1915, by the adoption of the Notification of Births Act taken the first step in this work.

After having engaged a lady health visitor I would suggest that in addition to the visiting all new born children who require her services, an infant welfare centre should be provided. At such an establishment infant consultations may take place with periodical baby weighing and advice may be given to expectant mothers. Whilst the chief part of the visitor's work will necessarily be devoted to the children, I think some little time should be given to the mothers.

More legislation is required as regards the working of pregnant women in factories. Dr. Sergeant, County M. O. H., states that "to avoid the pernicious effects of occupation on child bearing women it is desirable that action should be taken to prevent her working in a factory or workshop for two months previous to the birth of a child, or within 3 months after the event." The prohibition of 1 month, after confinement, provided for in the Factory and Workshop Act, 1901, is in his opinion not sufficient.

Careful records of all children visited should be kept in such a form that they may subsequently be available for the information of the School Medical Officer when the child is entered at a school. The Local Government Board hopes thus to make the medical supervision of the child continuous from birth until he reaches adult life.

In gauging the results of the adoption of the Notification of Births Act too much stress should not be laid on the statistics of infant mortality. It is reasonable to act on the assumption that the hygienic advice secured by the visits following notification must have valuable influence in securing improved health in childhood.

Further action under the scheme would be obtained by the provision of hospital accommodation for Puerperal Fever and Ophthalmia Neonatorum as previously advocated.

#### H.—VITAL STATISTICS OF THE DISTRICT.

The population estimated to the middle of 1914 is 16,764: North Ward, 3,730; South Ward, 4,469; East Ward, 4,360; Central Ward, 4,205.

*Deaths.*—The total number of deaths registered, including those of residents dying outside the district in public institutions, and deducting residents from outside who died in public institutions or from violence in this district was 193. 101 were males, and 92 females; giving a net rate of those belonging to the district of 11·5 per 1,000 of the population. In 1913 the rate was 11·8 per 1,000. The average for the past 5 years was 193, with a rate of 11·7 per 1,000, calculated on an average population of 16,483.



The deaths in the various wards were as follow : North Ward, 45 ; South Ward, 49 ; East Ward, 43 ; Central Ward, 56. The rate per 1,000 persons is : North Ward, 12·06 ; South Ward, 10·9 ; East Ward, 9·8 ; Central Ward, 13·3,

I append a table comparing the death rates in each ward for 1914, with those of the five previous years :

*Death Rates per 1,000 persons.*

	North	South	East	Central
1909	12·6	9·3	12·3	12·03
1910	9·1	11·7	7·6	12·3
1911	9·3	11·5	9·1	15·7
1912	14·6	12·7	8·1	18·6
1913	12·9	10·4	11·8	12·2
1914	12·06	10·9	9·8	13·3

7 persons died in Fall Birch Hospital, and 1 from violence belonging to another district.

The natural increase in the population is 164.

The age mortality was as follows : under 1 year, 27 ; 1 year and under 2 years, 9 ; 2 years and under 5, 7 ; 5 and under 15, 15 ; 15 and under 25, 9 ; 25 and under 45, 25 ; 45 and under 65, 51 ; 65 and upwards, 50.

*Births.*—During the year the births of 356 children were registered, and one was transferred from another district making a total of 357. 174 were boys, and 183 girls ; equal to a rate of 21·3 per 1,000. North Ward, 79 ; rate, 21·1. South Ward, 94 ; rate, 21·03. East Ward, 76 ; rate, 17·2. Central Ward, 108 ; rate, 24·9.

The average births for the past 5 years is 375, with a rate of 22·7 per 1,000 per annum. In 1913 the rate was 22·36 per 1,000.

For purposes of comparison I append a table giving the birth rates and death rates in the year 1914 for England and Wales.

## ENGLAND AND WALES.

*Birth-rate, Death-rate, and Infantile Mortality during the year 1914 (Provisional Figures).*

	Annual Rates per 1,000 Living.			Deaths under One year to 1,000 Births.
	Births.	Deaths.		
		Crude.	Stand'd-ized.*	
England and Wales...	23·6	13·9	13·6	105
96 great towns, including London	24·9	14·6	14·9	113
145 smaller towns ...	23·6	12·8	12·9	104
England and Wales, less the 241 towns	21·9	13·3	12·2	93
London ... ..	24·6	14·4	14·4	103

\* The standardized death-rates are the rates which would have been recorded had the sex and age constitution of the populations of the several areas been identical with England and Wales as enumerated in 1901. A description of the method of standardizing these death-rates is to be found in the Registrar General's Annual Report for 1911, page 29.

In order to compare the death rate in Horwich with the above, a factor is supplied by the Registrar General. Multiplication by this factor standardizes the rate on the basis of the age and sex constitution at census, 1911. The factor for Horwich is 1·14, which being above unity tends to increase the rate. The standardized rate for Horwich is thus 13·1.

This increase of rate, of course, means that at census 1911, Horwich had an age and sex constitution favourable to a low death rate.



Summarising the whole of the report one is pleased to note a reduction in the general death rate, zymotic death rate and respiratory death rate, also a marked reduction in the infantile death rate. We continue to have a small incidence of enteric and puerperal fever. The most notable sanitary improvements have been the abolition of the conservancy system of sewage disposal and the provision of a public playground in our most congested district. The chief lines of action during the coming year should be directed towards improving the housing of the district. Your efforts should also be devoted to the efficient organisation of a maternal and child welfare scheme."

Your obedient servant,

A handwritten signature in dark ink, reading "J. S. Sewell". The script is cursive and elegant, with the first letters of each word being capitalized and prominent.

Medical Officer of Health.

TABLE I.

Vital Statistics of Whole District during 1914 and previous Years.

HORWICH URBAN SANITARY DISTRICT.

YEAR.	Populati'n estimated to Middle of each Year.	Births.			Total Deaths registered in the District.		Transferable Deaths.		Nett Deaths belonging to the District.			
		Un- correct- ed Numb'r	Nett.		No.	Rate	of Non- Resdnts registrd in the District	of Res- idents not registrd in the District	Under 1 Year.		At all Ages.	
			Numb'r	Rate					No.	Rate per 1000 nett Births	No.	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1909	16430	406	406	24·7	188	11·4	3	5	46	113	190	11·5
1910	16646	388	388	23·3	168	11·09	8	10	50	128	170	10·2
1911	16286	364	364	22·3	167	10·2	8	28	40	109	187	11·4
1912	16463	346	346	21·1	205	12·4	11	28	26	74	222	13·4
1913	16539	371	371	22·36	181	10·9	13	28	43	116	196	11·8
1914	16764	356	357	21·3	177	10·5	8	24	27	75	193	11·5

Area of District in  
acres (land and  
inland water)

3,202.

Total population at all ages ... ..

Number of inhabited houses ... ..

Average number of persons per house...

16,286  
3,490  
4·6

At Census  
of 1911.



TABLE II.      CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1914.  
HORWICH URBAN SANITARY DISTRICT.

NOTIFIABLE DISEASES.	NUMBER OF CASES NOTIFIED.								TOTAL CASES NOTIFIED IN EACH LOCALITY.				TOTAL CASES RE-MOVED TO HOSPITAL.	
	At Ages—Years.								North Ward.	South Ward.	East Ward.	Cent'l Ward.		
	At all Ages.	Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.	65 and upwards.						
Small-pox. ....														
Cholera ....														
Diphtheria (including Membranous Croup).	18		3	14		1				8	4	5	9	
Erysipelas. ....	3			1						2		1		
Scarlet Fever ...	74	1	16	54	3				14	19	19	22	63	
Typhus Fever ...														
Enteric Fever ...	3					1			1		1	1	2	
Relapsing Fever ...														
Continued Fever...														
Puerperal Fever ...														
Cerebro-spinal Meningitis														
Poliomyelitis ...	33			3	9	12			5	11	6	11		
Pulmonary Tuberculosis..	7	1	1	4	1				1	1	1	4		
Other forms of ..														
Totals...	138	2	20	76	13	14	12	1	22	41	31	44	74	

Isolation Hospital—Fall Birch, Horwich; under conjoint control of Horwich, Westhoughton and Blackrod.

TABLE III. CAUSES OF, AND AGES AT DEATH, DURING YEAR 1914.

## HORWICH URBAN SANITARY DISTRICT.

CAUSES OF DEATH.	NETT DEATHS AT THE SUBJOINED AGES OF "RESIDENTS" WHETHER OCCURRING WITHIN OR WITHOUT THE DISTRICT.									TOTAL DEATHS WHETHER OF "RESIDENTS" OR "NON- RESIDENTS" IN INSTITUTIONS IN THE DISTRICT.
	All ages.	Under 1 year.	1 and under 2 years	2 and under 5 years	5 and under 15yrs.	15 and under 25yrs.	25 and under 45yrs.	45 and under 65yrs.	65 and up- wards.	
All causes { Certified ... { Uncertified	191 2	27	9	7	15	9	25	50 1	49 1	
Enteric Fever ... ..	3						1	2		3
Small-pox. ... ..										1
Measles ... ..										
Scarlet Fever ... ..										
Whooping-cough ... ..										
Diphtheria and Croup...	4		1		3					7
Influenza... ..										
Erysipelas ... ..										
Phthisis (Pulmonary Tuberculosis)... ..	15			1	1	3	5	5		
Tuberculous Meningitis..	3	1		2						
Other Tuberculous diseases ... ..	6		1		2	2	1 2	9	4	
Cancer, malignant disease... ..	15									
Rheumatic Fever ... ..										
Meningitis ... ..	4	1		1	2					
Organic Heart Disease...	31					1	4	12	14	
Bronchitis ... ..	8	1					1		6	
Pneumonia (all forms)...	7	1	2		1	1			2	
Other diseases of respira- tory organs ... ..	2							2		
Diarrhoea and Enteritis..	8	5	1						1	
Appendicitis and Typhlitis ... ..										
Cirrhosis of Liver ... ..	4						1	3		
Alcoholism ... ..	1							1		
Nephritis and Bright's Disease ... ..	10						4	4	2	
Puerperal Fever... ..										
Other accidents and diseases of Pregnancy and Parturition ... ..										
Congenital Debility and Malformation, includ- ing Premature Birth...	16	14	1	1						1
Violent Deaths, ex- cluding Suicide ... ..	5				2		1		1	
Suicides ... ..										
Other Defined Diseases...	49	3	3	2	3	2	4	13	19	
Diseases ill-defined or unknown ... ..	2	1					1			
	193	27	9	7	15	9	25	51	50	12
Sub-Entries included in above figures. Pneumonia					1	1			2	



TABLE IV.

HORWICH URBAN SANITARY DISTRICT.

## INFANT MORTALITY, 1914.

Nett Deaths from stated causes at various Ages under 1 year of Age.

CAUSE OF DEATH.	Under 1 week.	1-2 weeks.	2-3 weeks.	3-4 weeks.	Total under 1 month.	1-3 months.	3-6 months.	6-9 months.	9-12 months.	Total Deaths under 1 year.
All causes { Certified ...	...	...	...	...	...	...	...	...	...	...
{ Uncertified	...	...	...	...	...	...	...	...	...	...
{ Small-pox ... ..	...	...	...	...	...	...	...	...	...	...
{ Chicken-pox ... ..	...	...	...	...	...	...	...	...	...	...
{ Measles ... ..	...	...	...	...	...	...	...	...	...	...
{ Scarlet Fever ... ..	...	...	...	...	...	...	...	...	...	...
{ Whooping Cough ... ..	...	...	...	...	...	...	...	...	...	...
{ Diphtheria and Croup... ..	...	...	...	...	...	...	...	...	...	...
{ Erysipelas ... ..	...	...	...	...	...	...	...	...	...	...
{ Tuberculous Meningitis..	...	...	...	...	...	...	...	1	...	1
{ Abdominal Tuberculosis	...	...	...	...	...	...	...	...	...	...
{ Other Tuberculous Diseases ... ..	...	...	...	...	...	...	...	...	...	...
{ Meningitis (not Tuberculous)... ..	...	...	...	...	...	...	1	...	...	1
{ Convulsions ... ..	...	1	...	...	1	...	...	...	...	1
{ Laryngitis ... ..	...	...	...	...	...	...	...	...	...	...
{ Bronchitis ... ..	...	...	...	...	...	...	...	...	1	1
{ Pneumonia (all forms)... ..	...	...	...	...	...	1	...	...	...	1
{ Diarrhoea ... ..	...	...	...	...	...	...	...	1	...	1
{ Enteritis... ..	...	...	...	...	...	...	2	1	1	4
{ Gastritis... ..	...	...	...	...	...	...	1	...	...	1
{ Syphilis ... ..	...	...	...	...	...	1	...	...	...	1
{ Rickets ... ..	...	...	...	...	...	...	...	...	...	...
{ Suffocation, overlying ... ..	...	...	...	...	...	...	...	...	...	...
{ Injury at Birth ... ..	...	...	...	...	...	...	...	...	...	...
{ Atelectasis ... ..	...	...	...	...	...	...	...	...	...	...
{ Congenital Malformat'ns ... ..	...	1	...	1	2	...	...	...	...	2
{ Premature Birth ... ..	7	1	...	...	8	...	...	...	...	8
{ Atrophy, Debility and Marasmus ... ..	1	...	...	1	2	1	1	...	...	4
{ Other causes ... ..	...	...	...	...	...	...	...	1	...	1
	8	3	...	2	13	3	5	4	2	27

Nett Births in the year: legitimate, 347; illegitimate, 10.

Nett deaths in the year of legitimate infants, 24; illegitimate infants, 3.

## HORWICH URBAN SANITARY DISTRICT.

### Factories, Workshops, Workplaces, and Homework.

#### 1. INSPECTION.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions.
Factories (Including Factory Laundries)	28	...	...
Workshops and Bakehouses (Including Workshop Laundries)	22	...	...
Workplaces (Other than Outworkers' premises included in Part 3 of this Report)	7	...	...
Total ... ..	57	...	...

#### 2.—DEFECTS FOUND.

Particulars.	Number of Defects.			Number of Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspect'r	
<i>Nuisances under the Public Health Acts :—*</i>				
Want of cleanliness ... ..	2	2	...	...
Want of ventilation ... ..	...	...	...	...
Overcrowding ... ..	...	...	...	...
Want of drainage of floors ... ..	...	...	...	...
Other nuisances ... ..	...	...	...	...
Unsuitable Sanitary accommodation	2	2	...	...
Insufficient „ „	...	...	...	...
Total ... ..	4	4	...	...

\* Including those specified in sections 2, 3, 7 and 8 of the Factory and Workshop Act as remediable under the Public Health Acts.

#### 3.—HOMEWORK.

Nature of Work.	Outworkers' Lists, Section 107.		
	Lists received from Employers twice in the year.		
	Lists.	Outworkers.	
		Contractors.	Workmen.
Wearing Apparel—			
(1) making, &c. ... ..	4	2	...
(2) cleaning and washing ... ..	...	...	...
Total ... ..	4	2	...



## 4.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year.	Number.
Factories ... ..	30
Workshops ... ..	21
Workplaces... ..	5
Bakehouses... ..	17
Total number of workshops on Register ...	73

## 5.—OTHER MATTERS.

Class.	Number.
Matters notified to H.M. Inspector of Factories :—	
Failure to affix Abstract of the Factory and Workshop Act (S. 133)... ..	...
Action taken in matters referred by {	
H.M. Inspector as remediable {	Notified by H. M. Inspector... ..
under the Public Health Acts, {	4
but not under the Factory and {	Reports (of action taken sent to H. M. Inspector ...
Workshop Act (s. 5) ... ..	...
Other ... ..	...
Underground Bakehouses (s. 101) :—	
Certificates granted during the year ... ..	...
In use at the end of the year ... ..	...

J. S. SEWELL, M.D.,

Medical Officer of Health.

